What is claimed is:

1. A network for providing generalized Layer-2 VPNs, said network comprising:
   a set of elements interconnected by services;
   at least one first subset of said elements defining a private network;
   at least one second subset of elements different from said first subset defining a provider network wherein at least two subgroups of said first subset of elements may be connected via said provider network;
   a provisioning mechanism used to define element membership in said first subset of elements; and
   a signalling mechanism used to create connectivity between elements within said first subset of elements, said connectivity created across said second subset of elements, and said connectivity at a layer selected from one or both of the group consisting of Layer-2 and Layer-1.

2. A network for providing generalized Layer-2 VPNs as claimed in claim 1, said network further comprising:
   a network discovery mechanism used to propagate membership information regarding elements which are members of said first subset; and
   a service discovery mechanism used to propagate services information regarding services interconnecting elements in said first subset with elements in said second subset.

3. A network for providing generalized Layer-2 VPNs as claimed in claim 1, said signalling mechanism having:
   a manager mechanism having a first portion used to effect connection admission control and a second portion used to select encapsulation in response to a connection request; and
   a multi-service tunnel selector mechanism used to create connectivity across the provider network.

4. A network for providing generalized Layer-2 VPNs as claimed in claim 3, said network further comprising:

   a generalized single-sided signalling mechanism used to initiate said connection request triggered by an element of said first subset.

5. A method of organizing a network having a set of elements interconnected by services, wherein at least one first subset of said elements defines a private network and at least one second subset of elements different from said first subset defines a provider network and wherein at least two subgroups of said first subset of elements may be connected via said provider network, said method comprising:

   defining element membership in said first subset of elements via a provisioning mechanism;

   creating pseudo-wire connectivity between elements within said first subset of elements, said connectivity created across said second subset of elements, and said connectivity at a layer selected from one or both of the group consisting of Layer-2 and Layer-1.

6. The method of claim 5, further comprising the steps of:

   propagating GL2VPN membership information regarding elements which are members of said first subset via a network discovery mechanism; and

   propagating services information regarding services interconnecting elements in said first subset with elements in said second subset via a service discovery mechanism.

7. The method of claim 5, further comprising the steps of:

   effecting connection admission control via a first portion of a manager mechanism;

selecting an encapsulation protocol in response to a connection request via a second portion of a manager mechanism; and

creating connectivity across the provider network via a multi-service tunnel selector mechanism.

8. The method of claim 7 further comprising the step of:

initiating said connection request in response to a trigger by an element of said first subset via a generalized single-sided signalling mechanism.